Publisher: CDC; Journal: Emerging Infectious Diseases Article Type: Research; Volume: 8; Issue: 12; Year: 2002; Article ID: 02-0039 DOI: 10.3201/eid0812.020039; TOC Head: Research

Appendix 2. Algorithm used to assign probability that infection had occurred

 $p = \exp(\alpha + \beta_1 x_1 + ... + \beta_n x_n)/(1 + \exp(\alpha + \beta_1 x_1 + ... + \beta_9 x_9))$, where

 $\alpha = -5.16$

 $\beta_1 = +3.03$

 x_1 = dispensing any of five selected antibiotics

 $\beta_2 = +6.06$

 x_2 = any selected diagnosis in hospital

 $\beta_3 = +1.05$

 x_3 = any selected diagnosis in emergency dept (if $x_2 = 0$)

 $\beta_4 = +2.98$

 x_4 = any selected diagnosis in outpatient setting

 $\beta_5 = +2.91$

 x_5 = selected bacterial culture

 $\beta_6 = +1.91$

 x_6 = wound care

 $\beta_7 = -1.79$

 x_7 = interaction of x4 and x6

 $\beta_8 = -2.70$

 x_8 = interaction of x4 and x2

 $\beta_9 = -2.21$

 x_9 = interaction of x4 and x5